

# THE MATHEMATICS TEACHER

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Permutations and Combinations. May, 403-7.  
Some Mathematical Applications of Pari-mutuel Wagering. May, 394-99. *See also* Dec., 698, 699.  
Teaching Probability—Some Legal Applications. Feb., 150-53. *See also* Sept., 504.

## Problem Solving

*See also* "Curriculum" or content areas.

New Publications, 165-66, 255-56, 320, 410-11, 687, 689, 752.

Reader Reflections, 605.  
Flexibility and Algebraic Problem Solving. Apr., 294-95.  
Stuck? Don't Give Up! Subgoal-Generation Strategies in Problem Solving. Nov., 614-21, 634.

## Statistics

New Publications, 72, 74, 164, 410, 495, 594, 598-99, 688, 753.  
Reader Reflections, 8-9, 504.  
Collecting Homework: A Lesson in Randomness. Nov., 610-12.  
Estimation, Qualitative Thinking, and Problem Solving. Sept., 461-68.  
Exploring Baseball Data. Oct., 565-69, 584.  
Graph, Guess, and Compute. Dec., 716-21.  
Realistic Examples in Elementary Statistics. Dec., 740-43.  
Statistical Process Control and Control Charts: An Application for Statistics Classes. Sept., 480-86, 474.

## Teacher Education

New Projects, 412, 499, 692.  
New Publications, 69, 254, 256-57, 410, 495, 496, 597, 689-91, 754.

## Teaching Methods

*See content areas.*

### Discovery

Discovering Mathematics. Sept., 476-78.

### Games and Puzzles

New Publications, 256.  
Reader Reflections, 83-84, 172, 697.  
Place Your Geometry Class in "Jeopardy." Dec., 722-25. *See also* Dec., 697.

## Tests

New Publications, 754.  
The 1985 Nationwide University Mathematics Examination in the People's Republic of China. Mar., 196-203. *See also* Oct., 511.  
Coaching for Standardized Tests: Efficacy and Ethics. Sept., 424-26.  
A Look at the Second International Mathematics Study Results in the U.S.A. and Japan. May, 359-68.  
Sometimes Students' Errors Are Our Fault. Mar., 191-94. *See also* Sept., 504.

## Trigonometry

New Publications, 69, 70, 162-63.  
Reader Reflections, 81, 339, 418, 420, 605, 606-7.  
A Geometric Proof of the Sum-Product Identities for Trigonometric Functions. Mar., 240-44. *See also* Oct., 511.  
Another Approach to the Ambiguous Case. Mar., 208-9.

Computer-assisted Polar Graphing. Mar., 246-50.  
 A Graphic Expression of Trigonometric Identities. Nov., 643-44.  
 Making a Paper Calculator for Trigonometry. Dec., 727-28.  
 Rethinking the Ambiguous Case. May, 372.  
 Rounding Out the Trigonometric Functions. Sept., 472-74.  
 Whence the Built-in Functions? Mar., 209-12.

### Visual Aids and Audiovisual Material

See "New Products" under content areas.

### Worksheets

An Electrifying Introduction to Algebra. Apr., 301-11.  
*See also* Oct., 510.  
 Area Models and Expected Value. Nov., 650-58.  
 Area Models for Probability. Mar., 217-23.  
 Crystals: Through the Looking Glass with Planes, Points, and Rotational Symmetries. May, 377-88.  
 Estimation, Qualitative Thinking, and Problem Solving. Sept., 461-68.  
 Illustrating the Euler Line. May, 389-93. *See also* Dec., 697.  
 Introducing Function and Its Notation. Oct., 558-64.  
 Periodic Pictures. Feb., 126-37.  
 Polygons Made to Order. Jan., 44-50.  
 Skiing the Slopes. Dec., 733.  
 Statistical Process Control and Control Charts: An Application for Statistics Classes. Sept., 480-86, 474.

### reader reflections

(Continued from page 700)

straightedge, a right angle, and the ratio 79/63, easy to remember by noting that  $63 = 7 \cdot 9$ .

To construct the approximation, draw  $\overline{OA_1}$  sixty-three units in length (millimeters make for a suitable scale on notebook paper). From  $A_1$ , construct  $A_1B_1 \perp \overline{OA_1}$  with length seventy-nine units. Then  $m\angle A_1OB_1 \approx 360^\circ/7$ . Continue constructing the same angle,

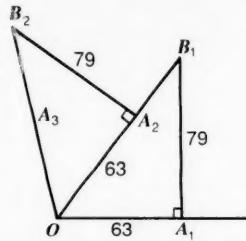


Fig. 1

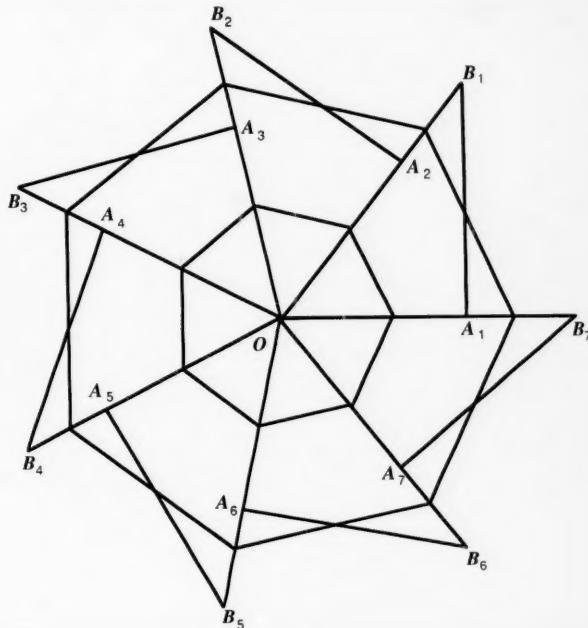


Fig. 2

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